



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,178	06/20/2003	J. Kirk Haselden	MSFT-1741 (301923.01)	9748
41505	7590	05/15/2006	EXAMINER	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)			VU, TUAN A	
ONE LIBERTY PLACE - 46TH FLOOR				
PHILADELPHIA, PA 19103			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/600,178	HASELDEN ET AL.	
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/20/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed 06/20/2003.

Claims 1-22 have been submitted for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a “useful, concrete, and tangible result” be accomplished. An “abstract idea” when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the “useful arts” when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a “useful, concrete and tangible result”.

Specifically, claim 11 recites a data structure for use in deployment comprising a data field for package components, a data field for dependencies derived therefrom and a field for delimiting the structure. As a whole, the claim amounts to reciting descriptive non-functional elements; hence is devoid of teaching that would reasonably convey a functional entity executing data transformation or performing interaction between the recited elements in order to yield a concrete and tangible result. The claim fails to fulfill the Practical Application test and is rejected for leading to a non-statutory subject matter.

Claims 12-14 for elaborating on a non-functional descriptive data structure, are not perceived to have remedied the deficiency of the base claims, and are rejected likewise.

Claim 15 recites a system comprising data representative of components dependencies and a merge module to generate a deployable bundle. There is absence in the claim of any hardware support/embodiment to carry out the functionality construed as this 'merge module'. From the specifications, this module amounts to a software entity (e.g. Fig. 4); thus, the system claim is devoid of any hardware support or tangible apparatus to carry the function of any software entity being claimed. Absent such hardware support or tangible embodiment, the claim is perceived as unable to yield a tangible result, and as set forth above, is rejected for leading to a non-statutory subject matter.

Claims 16-18 are rejected for not remedying to the deficiency of claim 15. Claim 19 only recites means for communicating, which can be construed as computer network implemented (Specifications, para 0021, 0028), but still lacks hardware to support the merging functionality of claim 15, thus not remedying to the rejected subject matter of claim 15. Hence claims 19 and 20 are also rejected for depending on a rejected subject matter of the base claim.

Claim Objections

4. Claim 11 is objected to because of the following informalities: the recited phrase 'a field to function to delimit' is not construed with proper syntactic form to enable a better understanding, e.g. the syntax has to convey whether the field is storing delimiting data or parameters; or the field is for storing or representing a function which is defined to delimit a structure dimension. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 2193

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 11-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 11 recites a data structure comprising a data field containing components of packages; a data field containing dependencies data derived from the first data field by means of scanning the package components data field thereof; and a field to function as to delimit the end of the data structure. Scanning the disclosure, there is description of table and files utilized in a merge-based process operating in merging existing merge tables and files to form a package components as in Figure 4 (see Specifications, pg. 11, para 0039-0040); but nowhere is there any reasonable teaching about a data structure having 3 type of data fields as claimed, e.g. the term 'data field' not even recited once in the course of the disclosure in regard to the context of scanning and merging items to form deployment package components as claimed.

Notwithstanding the fact that the 'data structure' is nowhere disclosed as being analogized to or construed as a deployment package, it is hard for one skill in the art to be apprised on the nature of the recited 'data structure' in light of the components being derived from the scanning of Fig.

4. Thus, one skill in the art would not be able to construe the invention based on the lack of disclosure, because the recited subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These *data field*

Art Unit: 2193

limitations will be treated as (i) data representing components of packages, (ii) dependencies data derived from those packages components and (iii) a field or data to represent a structure end; and the 'data structure' will be treated as --or assumed to be at best -- a deployment package.

Claims 12-14 are likewise rejected for not remedying to the deficiencies of the base claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Staelin, USPN: 6,117,187 (hereinafter Staelin).

As per claim 1, Staelin discloses a method for deployment of components, comprising: defining dependencies by components, wherein the components expose their dependencies to a cooperating interface; generating a list of defined dependencies (e.g. *manifest 300, needed resources block 400* – Fig. 1 – Note: manifest created in a debug environment operating on user's commands to build an installation – see col. 4 lines 37-56; Fig. 6C – reads on dependencies being defined and exposed to a cooperative interface via the manifest content being processed by such environment -- see col. 7, line 61 to col. 8, line 24);

identifying files associated with the defined dependencies (e.g. blocks *500, 600* – Fig. 1; Fig. 3-4); and

processing the dependency list and identified files to generate a deployable bundle (e.g. col. 6, line 34-48; Fig. 3-4 – Note: installation package reads on deployable bundle – see step 1000 Fig. 1).

As per claim 2, Staelin discloses communicating the deployable bundle to a cooperating environment (e.g. step 1100 -- Fig. 1; col. 12, lines 16-35; col. 3, lines 28-35).

As per claim 3, Staelin discloses merging the dependency list, the identified files, and default component elements to generate the deployable bundle (step 1100 - Fig. 1; Fig. 6-7).

As per claim 5, Staelin discloses providing an installer component (e.g. control scripts - Fig. 7) for inclusion in the deployable bundle.

As per claim 6, Staelin discloses validating (e.g. col. 10, lines 63 to col. 11, line 7) and installing the deployable bundle (e.g. col. 12, lines 25-26, 33-35 – Note: installation package destined for target environment installation – see step 320 Fig. 2 -- inherently teaches activation/execution and validation via such execution) in a computing environment.

As per claim 7, Staelin discloses providing configuration files (e.g. *newconfig* – col. 8, lines 61-62; Fig. 6A) for inclusion in the deployable bundle.

As per claim 4, Staelin discloses further comprising scanning the components to identify default elements and non-default elements (see Fig. 1, 3-6 – Note: Initial application of step 100, Fig. 1 reads on default component; see *preamble, template* – col. 11, line 64 to col. 12, line 8 – Note: templates with preamble when script is initially loaded prior to additional – non-default -- data being incorporated read on default elements);

As per claims 8-9, Staelin discloses

Art Unit: 2193

merging the dependency list, the identified files, and default component elements to generate the deployable bundle (e.g. col. 2, line 60 to col. 3, line 27; Fig. 1 – Note: Initial application being ported to developer's debug environment – see col. 4 lines 45-49 -- to be further enhanced via processing the manifest file reads on *default component* prior to be added more resources; col. 11, line 64 to col. 12, line 8),

a merge module to perform the merge (e.g. Fig. 1, 3-6 – Note: tool to enable the processing and sorting of filesets or subsets of libraries and control/config scripts for inclusion into a installation package reads on merging module – see combine).

As per claim 10, Staelin discloses a computer readable medium having computer readable instructions for:

defining dependencies by components, wherein the components expose their dependencies to a cooperating interface;

generating a list of defined dependencies: identifying files associated with the defined dependencies; and

processing the dependency list and identified files to generate a deployable bundle; all of which steps having been addressed in claim 1 above.

As per claim 11, Staelin discloses data structure (e.g. *installation package* –see Abstract) for use in the creation of packages for deployment comprising:

a data field containing data representing components of packages (e.g. *manifest 300*, *needed resources* block 400 – Fig. 1);

a data field containing dependencies data derived from the field containing the data representative of the components of the packages (e.g. blocks 500, 600 – Fig. 1; Fig. 3-4) by

Art Unit: 2193

scanning the first field to identify items on which the package components depend (col. 6, line 34-48; Fig. 3-4, 6A-D, Fig. 7 – Note: scanning files listed in manifest to further retrieve files subsets, libraries files or to implement further script instructions read on scanning the first field for items the listed components depend on --- see col. 7, line 61 to col. 8, line 24); and

a field to function to delimit the end of the data structure (steps 530, 560: No –Fig. 4; step 620, 645: No – Fig. 5; step 748: No, Fig. 6C; step 760: No, Fig. 6D).

As per claim 12, Staelin discloses a field derived from the data field containing dependencies by merging the component dependencies with data representing the package components; this is to be referred to the rejection of claim 8.

As per claim 13, Staelin discloses the field containing the merged data comprises data representative of configuration information about how to deploy the package; this is to be referred to the rejection of claim 7.

As per claim 14, Staelin discloses a field to instruct an installation program to install the package; this is to be referred to the rejection of claim 5.

As per claim 15, Staelin discloses a system to deploy a package having dependencies comprising:

dependency data representative of the dependencies of components of the package (e.g. *manifest 300, needed resources block 400* – Fig. 1; col. 7, line 61 to col. 8, line 24; Fig. 3-6 – Note: manifest created in a debug environment to build an reads on representative of dependencies of components); and

a merge module operating to merge the dependency data with the components of the package to generate a deployable bundle (see Fig. 1, 3-6 – refer to claim 9).

As per claim 16, Staelin discloses an installer, the installer (e.g. block 700 – Fig. 1; col. 8, line 60 to col. 9, line 8; Fig. 7 – Note: control scripts reads on installer acting on system files of target system) being merged by the merge module to generate the deployable bundle.

As per claim 17, Staelin discloses configuration information, the configuration information (e.g. *newconfig* – col. 8, lines 61-62; Fig. 6A – Note: control scripts also read on configuration information destined to support how the target system is to be configured) being merged by the merge module to generate the deployable bundle.

As per claim 18, Staelin discloses default package components, the default package components being merged by the merge module to generate the deployable bundle as addressed in claims 4 and 8.

As per claim 19, Staelin discloses a communication means for use in communicating the deployable bundle to a cooperating computing environment (e.g. step 1100 -- Fig. 1; col. 12, lines 16-35; col. 3, lines 28-35).

As per claim 20, Staelin discloses a validation means (e.g. col. 10, lines 63 to col. 11, line 7-- Note: test to see if all required control data are assembled according to debugger's assessment reads on validating to ensure proper deployment of package) to validate the proper deployment of the package.

As per claim 21, Staelin discloses a system for use in the deployment of components having dependencies comprising:

a means for determining the dependencies of components, the components exposing the dependencies to the means (e.g. *manifest 300*, *needed resources* block 400 – Fig. 1; col. 7, line 61 to col. 8, line 24; Fig. 3-6);

a means for merging the dependencies of the components with the components to generate a deployable bundle (e.g. col. 6, line 34-48; Fig. 3-4 – Note: installation package reads on deployable bundle – see step 1000 Fig. 1).

As per claim 22, Staelin discloses comprising an installation means, the installation means cooperating with the merging means for installing the deployable bundle (e.g. step 1100 -- Fig. 1; col. 12, lines 16-35; col. 3, lines 28-35 – Note: storing installation package for installation in the target system or to any computer in the network reads on cooperating means operating with the merging means to create the package being slated for installation).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2193

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tuan A Vu', with a long horizontal stroke extending to the right.

Tuan A Vu
Patent Examiner,
Art Unit 2193
May 11, 2006